Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Data Package Contains _____ Pages

Report Nbr: 34468

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05087	W07-012	B1LJ78	J6L290150-1	JL8W71AA	9JL8W710	7008361
		B1LJ83	J6L290150-2	JL8XA1AA	9JL8XA10	7008361
		B1LJJ3	J6L290150-3	JL8XP1AA	9JL8XP10	7008361
		B1LJ98	J6L290150-4	JL8XV1AA	9JL8XV10	7008361
		B1LJ68	J6L290153-1	JL80T1AA	9JL80T10	7008361
		B1LJ88	J6L290153-2	JL8041AA	9JL80410	7008361
		B1LJD6	J6L290153-3	JL8091AA	9JL80910	7008361
		B1LJJ8	J6L290153-4	JL81D1AA	9JL81D10	7008361
	I07-015	B1LK68	J6L290155-1	JL8141AA	9JL81410	7008359
	W07-012	B1LF70	J7A040186-1	JMEFC1AA	9JMEFC10	7008351
	S07-012	B1LD92	J7A040214-1	JMEL71AA	9JMEL710	7008350
		B1LD92	J7A040214-1	JMEL71AC	9JMEL710	7008351
		B1LD92	J7A040214-1	JMEL71AD	9JMEL710	7008352
		B1LD92	J7A040214-1	JMEL71AE	9JMEL710	7008361
		B1LD92	J7A040214-1	JMEL71AF	9JMEL710	7008353

Comments:

Report Nbr: 34468

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05087	S07-012	B1LDC2	J7A040214-2	JMEME1AA	9JMEME10	7008350
		B1LDC2	J7A040214-2	JMEME1AC	9JMEME10	7008351
		B1LDC2	J7A040214-2	JMEME1AD	9JMEME10	7008352
		B1LDC2	J7A040214-2	JMEME1AE	9JMEME10	7008361
		B1LDC2	J7A040214-2	JMEME1AF	9JMEME10	7008353
		B1LDB2	J7A040214-3	JMEMG1AA	9JMEMG10	7008350
		B1LDB2	J7A040214-3	JMEMG1AC	9JMEMG10	7008351
		B1LDB2	J7A040214-3	JMEMG1AD	9JMEMG10	7008352
		B1LDC7	J7A040214-4	JMEMH1AA	9JMEMH10	7008351
		B1LDC7	J7A040214-4	JMEMH1AC	9JMEMH10	7008352
		B1LDC7	J7A040214-4	JMEMH1AD	9JMEMH10	7008361
		B1LDC7	J7A040214-4	JMEMH1AE	9JMEMH10	7008353
		B1LC39	J7A040232-1	JMEQA1AA	9JMEQA10	7008359
		B1LC42	J7A040232-2	JMEQ51AA	9JMEQ510	7008359
	A07-012	B1LJR9	J7A040240-1	JMERP1AA	9JMERP10	7008359
		B1LJR9	J7A040240-1	JMERP1AC	9JMERP10	7008353
		B1LJT1	J7A040240-2	JMERQ1AA	9JMERQ10	7008361
		B1LJT1	J7A040240-2	JMERQ1AC	9JMERQ10	7008353
	G07-012	B1LJW0	J7A040243-1	JMER91AA	9JMER910	7008350
		B1LJW0	J7A040243-1	JMER91AC	9JMER910	7008351
		B1LJW0	J7A040243-1	JMER91AD	9JMER910	7008352
		B1LJW0	J7A040243-1	JMER91AE	9JMER910	7008355
		B1LJW0	J7A040243-1	JMER91AF	9JMER910	7008356
		B1LJX0	J7A040243-2	JMETL1AA	9JMETL10	7008350
		B1LJX0	J7A040243-2	JMETL1AC	9JMETL10	7008351
		B1LJX0	J7A040243-2	JMETL1AD	9JMETL10	7008352

Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05087	G07-012	B1LJX0	J7A040243-2	JMETL1AE	9JMETL10	7008355
		B1LJX0	J7A040243-2	JMETL1AF	9JMETL10	7008356

Comments:

SEVERN TRENT STL

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Richland, WA 99354

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Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

February 12, 2007

Attention: Dot Stewart

SAF Number	:	W07-012, I07-015, S07-012, A07-012, G07-012
Date SDG Closed	:	January 3, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05087
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between December 28, 2006 and January 3, 2007 twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1LJ98	JL8XV	12/28/06	WATER
B1LJJ3	JL8XP	12/28/06	WATER
B1LJ83	JJ8XA	12/28/06	WATER
B1LJ78	JL8W7	12/28/06	WATER
B1LJJ8	JL81D	12/28/06	WATER
B1LJD6	JL809	12/28/06	WATER
B1LJ88	JL804	12/28/06	WATER
B1LJ68	JL80T	12/28/06	WATER
B1LK68	JL814	12/28/06	WATER
B1LF70	JMEFC	01/02/07	WATER
B1LDC7	JMEMH	01/02/07	WATER

B1LDB2	JMEMG	01/02/07	WATER
B1LDC2	JMEME	01/02/07	WATER
B1LD92	JMEL7	01/02/07	WATER
B1LC42	JMEQ5	01/02/07	WATER
B1LC39	JMEQA	01/02/07	WATER
B1LJT1	JMERQ	01/03/07	WATER
B1LJR9	JMERP	01/03/07	WATER
B1LJX0	JMETL	01/03/07	WATER
B1LJW0	JMER9	01/03/07	WATER

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006
Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Technetium-99 by TEVA method RICH-RC-5065
Tritium by method RICH-RC-5007
Laser Induced Phosphorimetry
Total Uranium by method RICH-RC-5058

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1LJX0) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1LDB2) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006
The LCS, batch blank, samples and sample duplicate (B1LJW0) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:
The LCS, batch blank, samples and sample duplicate (B1LJW0) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1LK68) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:
The LCS, batch blank, samples, sample duplicate (B1LJ78), and sample matrix spike (B1LJ83) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1LJW0) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:
The LCS, batch blank, samples, sample duplicate (B1LJR9), and sample matrix spike (B1LJT1) results are within contractual requirements.

Pacific Northwest National Laboratories
February 12, 2007

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sherryl A. Adam
Project Manager

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**STL Richland's SOP number**
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/vn), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) *u_c - Combined Uncertainty.*	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, *u_c the combined uncertainty*. The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34468 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JL80410	B1LJ88		MW6-SBB-A1	W07-012	W05087					12/28/2006 09:21

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008361	TC-99	14133-76-7	7.08E+02	pCi/L	1.5E+01	5.4E+01		9.93E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	01/23/2007 19:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JL80910	B1LJD6		MW6-SBB-A1	W07-012	W05087					12/28/2006 10:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008361	TC-99	14133-76-7	2.49E+03	pCi/L	2.7E+01	1.7E+02		9.89E+00	100.0	TC99_ETVDSK_LS	1.256E-01	L	01/23/2007 19:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JL80T10	B1LJ68		MW6-SBB-A1	W07-012	W05087					12/28/2006 08:21

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008361	TC-99	14133-76-7	1.74E+04	pCi/L	7.2E+01	1.2E+03		9.94E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	01/23/2007 19:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JL81410	B1LK68		MW6-SBB-A1	I07-015	W05087					12/28/2006 08:39

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008359	I-129L	15046-84-1	9.59E-01	pCi/L	2.8E-01	2.8E-01	U	4.99E-01	90.0	I129LL_SEP_LEPS	3.9021E+00	L	02/07/2007 14:55	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JL81D10	B1LJJ8		MW6-SBB-A1	W07-012	W05087					12/28/2006 11:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008361	TC-99	14133-76-7	1.06E+01	pCi/L	4.4E+00	6.5E+00		9.81E+00	100.0	TC99_ETVDSK_LS	1.268E-01	L	01/23/2007 19:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JL8W710	B1LJ78		MW6-SBB-A1	W07-012	W05087					12/28/2006 11:33

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008361	TC-99	14133-76-7	8.88E+02	pCi/L	1.7E+01	6.6E+01		9.96E+00	100.0	TC99_ETVDSK_LS	1.25E-01	L	01/23/2007 19:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JL8XA10	B1LJ83		MW6-SBB-A1	W07-012	W05087					12/28/2006 11:03

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008361	TC-99	14133-76-7	6.08E+03	pCi/L	4.2E+01	4.2E+02		9.90E+00	100.0	TC99_ETVDSK_LS	1.251E-01	L	01/23/2007 19:37	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34468 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JL8XP10	B1LJJ3		MW6-SBB-A1	W07-012	W05087					12/28/2006 09:37

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008361	TC-99	14133-76-7	1.94E+01	pCi/L	4.7E+00	7.1E+00		9.82E+00	100.0	TC99_ETVDSK_LS	1.263E-01	L	01/23/2007 19:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JL8XV10	B1LJ98		MW6-SBB-A1	W07-012	W05087					12/28/2006 10:32

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008361	TC-99	14133-76-7	2.65E+00	pCi/L	4.1E+00	6.0E+00	U	9.80E+00	100.0	TC99_ETVDSK_LS	1.267E-01	L	01/23/2007 19:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JMEFC10	B1LF70		MW6-SBB-A1	W07-012	W05087					01/02/2007 11:29

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008351	ALPHA	12587-46-1	6.36E-01	pCi/L	9.8E-01	9.9E-01	U	1.99E+00	100.0	9310_ALPHABETA	1.091E-01	L	01/30/2007 17:18	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JMEL710	B1LD92		MW6-SBB-A1	S07-012	W05087					01/02/2007 10:37

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008350	H-3	10028-17-8	3.21E+05	pCi/L	1.8E+03	1.2E+04		2.93E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/24/2007 15:34	I
7008351	ALPHA	12587-46-1	6.18E+00	pCi/L	2.5E+00	2.9E+00		2.35E+00	100.0	9310_ALPHABETA	1.723E-01	L	01/30/2007 14:12	I
7008352	BETA	12587-47-2	6.03E+01	pCi/L	4.0E+00	8.7E+00		3.23E+00	100.0	9310_ALPHABETA	1.893E-01	L	01/30/2007 14:27	I
7008361	TC-99	14133-76-7	2.27E+02	pCi/L	9.1E+00	2.1E+01		9.86E+00	100.0	TC99_ETVDSK_LS	1.259E-01	L	01/23/2007 19:37	I
7008353	Uranium	7440-61-1	9.07E+00	ug/L	1.1E+00	1.1E+00		7.79E-02		UTOT_KPA	2.69E-02	ML	02/06/2007 14:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JMEME10	B1LDC2		MW6-SBB-A1	S07-012	W05087					01/02/2007 11:34

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008350	H-3	10028-17-8	4.90E+05	pCi/L	2.2E+03	1.8E+04		2.94E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/24/2007 16:56	I
7008351	ALPHA	12587-46-1	3.35E+00	pCi/L	1.9E+00	2.0E+00		1.96E+00	100.0	9310_ALPHABETA	1.732E-01	L	01/30/2007 14:12	I
7008352	BETA	12587-47-2	2.51E+01	pCi/L	2.6E+00	4.1E+00		2.89E+00	100.0	9310_ALPHABETA	2.01E-01	L	01/30/2007 14:27	I
7008361	TC-99	14133-76-7	6.46E+01	pCi/L	6.0E+00	1.0E+01		9.94E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	01/23/2007 19:37	I
7008353	Uranium	7440-61-1	8.38E+00	ug/L	1.0E+00	1.0E+00		8.15E-02		UTOT_KPA	2.57E-02	ML	02/06/2007 14:34	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34468 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JMEMG10	B1LDB2		MW6-SBB-A1	S07-012	W05087					01/02/2007 12:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008350	H-3	10028-17-8	4.42E+04	pCi/L	6.8E+02	1.8E+03		2.94E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/24/2007 18:18	I
7008351	ALPHA	12587-46-1	2.68E+00	pCi/L	1.6E+00	1.7E+00		1.77E+00	100.0	9310_ALPHABETA	2.011E-01	L	01/30/2007 14:12	I
7008352	BETA	12587-47-2	1.01E+01	pCi/L	1.9E+00	2.3E+00		2.79E+00	100.0	9310_ALPHABETA	2.005E-01	L	01/30/2007 14:27	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JMEMH10	B1LDC7		MW6-SBB-A1	S07-012	W05087					01/02/2007 09:42

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008351	ALPHA	12587-46-1	6.15E+00	pCi/L	2.5E+00	2.8E+00		2.21E+00	100.0	9310_ALPHABETA	1.729E-01	L	01/30/2007 14:12	I
7008352	BETA	12587-47-2	1.72E+01	pCi/L	2.2E+00	3.2E+00		2.65E+00	100.0	9310_ALPHABETA	2.019E-01	L	01/30/2007 14:27	I
7008361	TC-99	14133-76-7	2.46E+01	pCi/L	4.9E+00	7.5E+00		9.89E+00	100.0	TC99_ETVDSK_LS	1.254E-01	L	01/23/2007 19:37	I
7008353	Uranium	7440-61-1	8.60E+00	ug/L	8.8E-01	8.8E-01		8.32E-02		UTOT_KPA	2.52E-02	ML	02/06/2007 14:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JMEQ510	B1LC42		MW6-SBB-A1	S07-012	W05087					01/02/2007 10:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008359	I-129L	15046-84-1	4.78E-01	pCi/L	3.0E-01	3.0E-01	U	3.88E-01	92.2	I129LL_SEP_LEPS	3.9632E+00	L	02/07/2007 17:16	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JMEQA10	B1LC39		MW6-SBB-A1	S07-012	W05087					01/02/2007 09:17

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008359	I-129L	15046-84-1	1.59E-01	pCi/L	1.4E-01	1.6E-01	U	3.25E-01	83.5	I129LL_SEP_LEPS	3.9562E+00	L	02/07/2007 14:58	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JMER910	B1LJW0		MW6-SBB-A1	G07-012	W05087					01/03/2007 10:15

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008350	H-3	10028-17-8	1.80E+04	pCi/L	4.4E+02	8.3E+02		2.93E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/24/2007 19:40	I
7008351	ALPHA	12587-46-1	1.36E+00	pCi/L	1.2E+00	1.2E+00	U	1.81E+00	100.0	9310_ALPHABETA	1.927E-01	L	01/30/2007 14:12	I
7008352	BETA	12587-47-2	3.32E+03	pCi/L	2.6E+01	7.0E+02		3.40E+00	100.0	9310_ALPHABETA	1.00E-01	L	01/30/2007 15:18	I
7008355	BE-7	13966-02-4	-3.94E+00	pCi/L	2.2E+01	2.2E+01	U	3.83E+01		GAMMALL_GS	1.9522E+00	L	01/30/2007 11:10	I
7008355	CO-60	10198-40-0	2.35E+00	pCi/L	2.7E+00	2.7E+00	U	6.00E+00		GAMMALL_GS	1.9522E+00	L	01/30/2007 11:10	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

7008355	CS-134	13967-70-9	6.98E-01	pCi/L	2.4E+00	2.4E+00	U	4.76E+00		GAMMALL_GS	1.9522E+00	L	01/30/2007	11:10 I
7008355	CS-137	10045-97-3	-1.53E-01	pCi/L	2.0E+00	2.0E+00	U	3.71E+00		GAMMALL_GS	1.9522E+00	L	01/30/2007	11:10 I
7008355	EU-152	14683-23-9	-9.76E+00	pCi/L	5.9E+00	5.9E+00	U	8.43E+00		GAMMALL_GS	1.9522E+00	L	01/30/2007	11:10 I
7008355	EU-154	15585-10-1	8.57E-01	pCi/L	7.4E+00	7.4E+00	U	1.47E+01		GAMMALL_GS	1.9522E+00	L	01/30/2007	11:10 I
7008355	EU-155	14391-16-3	-1.93E+00	pCi/L	6.1E+00	6.1E+00	U	1.01E+01		GAMMALL_GS	1.9522E+00	L	01/30/2007	11:10 I
7008355	K-40	13966-00-2	3.18E+01	pCi/L	6.0E+01	6.0E+01	U	1.38E+02		GAMMALL_GS	1.9522E+00	L	01/30/2007	11:10 I
7008355	RU-106	13967-48-1	8.28E+00	pCi/L	1.8E+01	1.8E+01	U	3.55E+01		GAMMALL_GS	1.9522E+00	L	01/30/2007	11:10 I
7008355	SB-125	14234-35-6	-2.46E+00	pCi/L	6.0E+00	6.0E+00	U	1.03E+01		GAMMALL_GS	1.9522E+00	L	01/30/2007	11:10 I
7008356	SR-90	10098-97-2	2.23E+03	pCi/L	1.5E+01	3.2E+02		9.72E-01	78.0	SRISO_SEP_PRE	1.007E+00	L	02/01/2007	05:34 I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JMERP10	B1LJR9		MW6-SBB-A1	A07-012	W05087					01/03/2007 12:22

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008359	I-129L	15046-84-1	7.70E-02	pCi/L	1.5E-01	1.5E-01	U	3.00E-01	87.3	I129LL_SEP_LEPS	3.9368E+00	L	02/07/2007 17:17	I
7008353	Uranium	7440-61-1	2.62E+00	ug/L	2.7E-01	2.7E-01		8.03E-02		UTOT_KPA	2.61E-02	ML	02/06/2007 14:39	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JMERQ10	B1LJT1		MW6-SBB-A1	A07-012	W05087					01/03/2007 13:16

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008361	TC-99	14133-76-7	4.61E+01	pCi/L	5.5E+00	8.9E+00		9.91E+00	100.0	TC99_ETVDSK_LS	1.256E-01	L	01/23/2007 19:37	I
7008353	Uranium	7440-61-1	1.75E+01	ug/L	2.1E+00	2.1E+00		7.73E-02		UTOT_KPA	2.71E-02	ML	02/06/2007 14:43	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JMETL10	B1LJX0		MW6-SBB-A1	G07-012	W05087					01/03/2007 11:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7008350	H-3	10028-17-8	1.80E+04	pCi/L	4.5E+02	8.3E+02		2.95E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/24/2007 22:23	I
7008351	ALPHA	12587-46-1	1.18E+00	pCi/L	1.1E+00	1.1E+00	U	1.66E+00	100.0	9310_ALPHABETA	1.92E-01	L	01/30/2007 15:34	I
7008352	BETA	12587-47-2	2.46E+03	pCi/L	2.3E+01	3.2E+02		2.79E+00	100.0	9310_ALPHABETA	2.01E-01	L	01/30/2007 14:27	I
7008355	BE-7	13966-02-4	1.90E+00	pCi/L	2.5E+01	2.5E+01	U	4.66E+01		GAMMALL_GS	2.0001E+00	L	01/30/2007 11:11	I
7008355	CO-60	10198-40-0	2.21E+00	pCi/L	3.1E+00	3.1E+00	U	6.36E+00		GAMMALL_GS	2.0001E+00	L	01/30/2007 11:11	I
7008355	CS-134	13967-70-9	5.90E-01	pCi/L	2.5E+00	2.5E+00	U	4.84E+00		GAMMALL_GS	2.0001E+00	L	01/30/2007 11:11	I
7008355	CS-137	10045-97-3	2.69E-01	pCi/L	2.4E+00	2.4E+00	U	4.51E+00		GAMMALL_GS	2.0001E+00	L	01/30/2007 11:11	I
7008355	EU-152	14683-23-9	-5.32E-01	pCi/L	5.7E+00	5.7E+00	U	9.93E+00		GAMMALL_GS	2.0001E+00	L	01/30/2007 11:11	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

7008355	EU-154	15585-10-1	-1.00E+00	pCi/L	7.6E+00	7.6E+00	U	1.42E+01		GAMMALL_GS	2.0001E+00	L	01/30/2007	11:11 I
7008355	EU-155	14391-16-3	-1.74E+00	pCi/L	4.7E+00	4.7E+00	U	8.03E+00		GAMMALL_GS	2.0001E+00	L	01/30/2007	11:11 I
7008355	K-40	13966-00-2	-5.36E+01	pCi/L	4.8E+01	4.8E+01	U	9.95E+01		GAMMALL_GS	2.0001E+00	L	01/30/2007	11:11 I
7008355	RU-106	13967-48-1	-3.66E-01	pCi/L	2.3E+01	2.3E+01	U	4.21E+01		GAMMALL_GS	2.0001E+00	L	01/30/2007	11:11 I
7008355	SB-125	14234-35-6	2.46E-01	pCi/L	5.3E+00	5.3E+00	U	9.61E+00		GAMMALL_GS	2.0001E+00	L	01/30/2007	11:11 I
7008356	SR-90	10098-97-2	1.39E+03	pCi/L	8.3E+00	2.0E+02		6.97E-01	78.3	SRISO_SEP_PRE	1.0049E+00	L	02/01/2007	06:36 I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JMJM01AB	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/03/2007 11:04
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008351	ALPHA	2.10E-02	pCi/L	2.0E-01	U	5.35E-01	100.0		9310_ALPHAB	2.014E-01	01/30/2007				D
BLK	12587-46-1			2.0E-01						L	17:18				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id:	JMJM21AB	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/02/2007 12:36
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 01/02/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008352	BETA	1.28E+00	pCi/L	9.4E-01	U	1.75E+00	100.0		9310_ALPHAB	2.009E-01	01/30/2007				D
BLK	12587-47-2			9.3E-01						L	15:18				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JMJM31AB	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:**	01/03/2007 12:22	
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**		
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:**	01/03/2007	

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BI	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008353	Uranium	0.00E+00	ug/L	0.0E+00	U	2.10E-01			UTOT_KPA	2.52E-02	02/06/2007				D
BLK	7440-61-1			0.0E+00						ML	14:24				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JMJM51AB **Sdg/Rept Nbr:** W05087 34468 **Collection Date:** 01/03/2007 10:15

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BL	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008355	BE-7	5.24E-01	pCi/L	2.3E+01	U	4.22E+01			GAMMALL_GS	2.00E+00	01/30/2007				D
BLK	13966-02-4			2.3E+01						L	11:11				
7008355	CO-60	-5.22E-01	pCi/L	1.9E+00	U	3.62E+00			GAMMALL_GS	2.00E+00	01/30/2007				D
BLK	10198-40-0			1.9E+00						L	11:11				
7008355	CS-134	-1.49E+00	pCi/L	2.1E+00	U	3.52E+00			GAMMALL_GS	2.00E+00	01/30/2007				D
BLK	13967-70-9			2.1E+00						L	11:11				
7008355	CS-137	-7.66E-01	pCi/L	2.1E+00	U	3.76E+00			GAMMALL_GS	2.00E+00	01/30/2007				D
BLK	10045-97-3			2.1E+00						L	11:11				
7008355	EU-152	1.94E+00	pCi/L	5.1E+00	U	9.66E+00			GAMMALL_GS	2.00E+00	01/30/2007				D
BLK	14683-23-9			5.1E+00						L	11:11				
7008355	EU-154	5.11E+00	pCi/L	6.2E+00	U	1.43E+01			GAMMALL_GS	2.00E+00	01/30/2007				D
BLK	15585-10-1			6.2E+00						L	11:11				
7008355	EU-155	1.10E+00	pCi/L	4.4E+00	U	8.00E+00			GAMMALL_GS	2.00E+00	01/30/2007				D
BLK	14391-16-3			4.4E+00						L	11:11				
7008355	K-40	-1.61E+01	pCi/L	4.4E+01	U	9.67E+01			GAMMALL_GS	2.00E+00	01/30/2007				D
BLK	13966-00-2			4.4E+01						L	11:11				
7008355	RU-106	2.67E+00	pCi/L	2.0E+01	U	3.83E+01			GAMMALL_GS	2.00E+00	01/30/2007				D
BLK	13967-48-1			2.0E+01						L	11:11				
7008355	SB-125	-2.13E+00	pCi/L	5.7E+00	U	9.96E+00			GAMMALL_GS	2.00E+00	01/30/2007				D
BLK	14234-35-6			5.7E+00						L	11:11				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id:	JMJM61AB	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/03/2007 10:15
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BN	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008356	SR-90	3.83E-01	pCi/L	3.1E-01	U	5.83E-01	70.0		SRISO_SEP_P	9.999E-01	02/01/2007				D
BLK	10098-97-2			3.0E-01						L	05:59				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JMJM71AB	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 12/28/2006 08:39
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/28/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008359	I-129L	-3.96E-03	pCi/L	1.2E-01	U	2.21E-01	90.3		I129LL_SEP_L	3.884E+00	02/07/2007				D
BLK	15046-84-1			1.2E-01						L	17:18				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id:	JMJM81AB	**Sdg/Rept Nbr:**	W05087 34468	**Collection Date:**	12/28/2006 11:33
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	**BLK**	**Received Date:**	12/28/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BR	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008361	TC-99	-2.14E+00	pCi/L	3.5E+00	U	6.17E+00	100.0		TC99_ETVDSK	2.013E-01	01/23/2007				D
BLK	14133-76-7			2.5E+00						L	19:37				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id:	JMJMX1AB	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/03/2007 10:15
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008350	H-3	9.52E+01	pCi/L	1.4E+02	U	2.94E+02	100.0		906.0_H3_LSC	5.00E-03	01/24/2007				D
BLK	10028-17-8			1.2E+02						L	10:07				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JMJMX1DX	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/03/2007 10:15
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008350	H-3	8.16E+01	pCi/L	1.4E+02	U	3.01E+02	100.0		906.0_H3_LSC	5.00E-03	01/24/2007				D
BLK	10028-17-8			1.3E+02						L	12:51				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JMJM01CS	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/03/2007 11:04
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008351	ALPHA	1.88E+01	pCi/L	4.8E+00		6.75E-01	100.0	2.23E+01	9310_ALPHAB	2.02E-01	01/30/2007			70	D
BS	12587-46-1			2.0E+00				84.1		L	17:18			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JMJM21CS	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/02/2007 12:36
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 01/02/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BH	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008352	BETA	2.16E+01	pCi/L	3.8E+00		1.82E+00	100.0	2.22E+01	9310_ALPHAB	2.025E-01	01/30/2007			70	D
BS	12587-47-2			1.7E+00				97.2		L	15:18			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JMJM31CS **Sdg/Rept Nbr:** W05087 34468 **Collection Date:** 01/03/2007 12:22

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008353	Uranium	3.40E+01	ug/L	4.0E+00		8.12E-02		3.51E+01	UTOT_KPA	2.58E-02	02/06/2007			70	D
BS	7440-61-1			4.0E+00				96.9		ML	14:28			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JMJM31DS **Sdg/Rept Nbr:** W05087 34468 **Collection Date:** 01/03/2007 12:22

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BK	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008353	Uranium	3.52E+00	ug/L	3.6E-01		8.22E-02		3.56E+00	UTOT_KPA	2.55E-02	02/06/2007			70	D
BS	7440-61-1			3.6E-01				98.9		ML	14:30			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JMJM51CS **Sdg/Rept Nbr:** W05087 34468 **Collection Date:** 01/03/2007 10:15

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BM	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008355	CO-60	3.59E+01	pCi/L	8.3E+00		4.45E+00		3.84E+01	GAMMALL_GS	2.00E+00	01/30/2007			70	D
BS	10198-40-0			8.3E+00				93.4		L	11:11			130	
7008355	CS-137	2.69E+01	pCi/L	6.6E+00		4.19E+00		2.47E+01	GAMMALL_GS	2.00E+00	01/30/2007			70	D
BS	10045-97-3			6.6E+00				109.1		L	11:11			130	
7008355	EU-152	7.53E+01	pCi/L	1.8E+01		1.05E+01		7.72E+01	GAMMALL_GS	2.00E+00	01/30/2007			70	D
BS	14683-23-9			1.8E+01				97.5		L	11:11			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JMJM61CS **Sdg/Rept Nbr:** W05087 34468 **Collection Date:** 01/03/2007 10:15

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BO	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008356	SR-90	1.48E+01	pCi/L	2.3E+00		5.68E-01	69.7	1.36E+01	SRISO_SEP_P	1.0002E+00	02/01/2007			70	D
BS	10098-97-2			8.8E-01				108.9		L	05:59			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JMJM71CS **Sdg/Rept Nbr:** W05087 34468 **Collection Date:** 12/28/2006 08:39

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/28/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BQ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008359	I-129L	8.94E+00	pCi/L	1.2E+00		4.38E-01	79.0	9.59E+00	I129LL_SEP_L	4.001E+00	02/07/2007			70	D
BS	15046-84-1			1.2E+00				93.3		L	19:02			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JMJM81CS	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 12/28/2006 11:33
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BS**		**Received Date:** 12/28/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BS	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008361	TC-99	3.10E+02	pCi/L	2.5E+01		6.21E+00	100.0	3.40E+02	TC99_ETVDSK	1.999E-01	01/23/2007			70	D
BS	14133-76-7			8.0E+00				91.3		L	19:37			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JMJMX1CS	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/03/2007 10:15
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BS**		**Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008350	H-3	2.60E+03	pCi/L	2.5E+02		2.94E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	01/24/2007			70	D
BS	10028-17-8			2.0E+02				95.6		L	11:29			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JMJMX1EM	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/03/2007 10:15
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BS**		**Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BW	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008350	H-3	2.69E+03	pCi/L	2.5E+02		3.01E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	01/24/2007			70	D
BS	10028-17-8			2.1E+02				99.0		L	14:13			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JL8141CR **Sdg/Rept Nbr:** W05087 34468 **Collection Date:** 12/28/2006 08:39

Client Id: B1LK68 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 12/28/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-015	MW6-SBB-A19981								AU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008359	I-129L	9.45E-01	pCi/L	2.6E-01	U	5.22E-01	87.6		I129LL_SEP_L	3.9034E+00	02/07/2007	1.5	0.1		D
DUP	15046-84-1	9.59E-01		2.6E-01						L	14:57	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id:	JL8W71CR	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 12/28/2006 11:33
Client Id:	B1LJ78	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/28/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-012	MW6-SBB-A19981								AV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008361	TC-99	8.72E+02	pCi/L	6.5E+01		9.90E+00	100.0		TC99_ETVDSK	1.252E-01	01/23/2007	1.8	0.4		D
DUP	14133-76-7	8.88E+02		1.6E+01						L	19:37	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id:	JMEMG1ER	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/02/2007 12:36
Client Id:	B1LDB2	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 01/02/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-012	MW6-SBB-A19981								AX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008352	BETA	1.19E+01	pCi/L	2.5E+00		2.50E+00	100.0		9310_ALPHAB	2.012E-01	01/30/2007	16.4	1.		D
DUP	12587-47-2	1.01E+01		1.9E+00						L	14:27	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JMER91GR	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/03/2007 10:15
Client Id:	B1LJW0	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
G07-012	MW6-SBB-A19981								AY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008350	H-3	1.84E+04	pCi/L	8.5E+02		2.95E+02	100.0		906.0_H3_LSC	5.00E-03	01/24/2007	2.2	0.7		D
DUP	10028-17-8	1.80E+04		4.5E+02						L	21:02	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JMER91HR **Sdg/Rept Nbr:** W05087 34468 **Collection Date:** 01/03/2007 10:15

Client Id: B1LJW0 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
G07-012	MW6-SBB-A19981								AZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008355	BE-7	1.53E+01	pCi/L	2.6E+01	U	4.96E+01			GAMMALL_GS	1.9552E+00	01/30/2007	339.3	1.		D
DUP	13966-02-4	-3.94E+00		2.6E+01						L	11:10	20.0	3		
7008355	CO-60	8.14E-01	pCi/L	2.7E+00	U	5.49E+00			GAMMALL_GS	1.9552E+00	01/30/2007	96.9	0.8		D
DUP	10198-40-0	2.35E+00		2.7E+00						L	11:10	20.0	3		
7008355	CS-134	-7.69E-01	pCi/L	2.7E+00	U	4.85E+00			GAMMALL_GS	1.9552E+00	01/30/2007	0.0	0.8		D
DUP	13967-70-9	6.98E-01		2.7E+00						L	11:10	20.0	3		
7008355	CS-137	2.13E-01	pCi/L	2.4E+00	U	4.49E+00			GAMMALL_GS	1.9552E+00	01/30/2007	1231.6	0.2		D
DUP	10045-97-3	-1.53E-01		2.4E+00						L	11:10	20.0	3		
7008355	EU-152	2.90E+00	pCi/L	5.6E+00	U	1.07E+01			GAMMALL_GS	1.9552E+00	01/30/2007	0.0	3.2		D
DUP	14683-23-9	-9.76E+00		5.6E+00						L	11:10	20.0	3		
7008355	EU-154	-8.77E-01	pCi/L	3.7E+00	U	7.59E+00			GAMMALL_GS	1.9552E+00	01/30/2007	0.0	0.7		D
DUP	15585-10-1	8.57E-01		3.7E+00						L	11:10	20.0	3		
7008355	EU-155	-1.46E-01	pCi/L	5.5E+00	U	9.47E+00			GAMMALL_GS	1.9552E+00	01/30/2007	0.0	0.5		D
DUP	14391-16-3	-1.93E+00		5.5E+00						L	11:10	20.0	3		
7008355	K-40	1.15E+00	pCi/L	4.8E+01	U	5.10E+01			GAMMALL_GS	1.9552E+00	01/30/2007	186.1	0.9		D
DUP	13966-00-2	3.18E+01		4.8E+01						L	11:10	20.0	3		
7008355	RU-106	-2.11E+01	pCi/L	2.1E+01	U	3.19E+01			GAMMALL_GS	1.9552E+00	01/30/2007	0.0	2.		D
DUP	13967-48-1	8.28E+00		2.1E+01						L	11:10	20.0	3		
7008355	SB-125	-4.47E-01	pCi/L	6.6E+00	U	1.17E+01			GAMMALL_GS	1.9552E+00	01/30/2007	0.0	0.4		D
DUP	14234-35-6	-2.46E+00		6.6E+00						L	11:10	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JMER91JR **Sdg/Rept Nbr:** W05087 34468 **Collection Date:** 01/03/2007 10:15

Client Id: B1LJW0 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
G07-012	MW6-SBB-A19981								BA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008356	SR-90	2.05E+03	pCi/L	2.9E+02		8.89E-01	82.9		SRISO_SEP_P	1.0058E+00	02/01/2007	8.3	0.9		D
DUP	10098-97-2	2.23E+03		1.4E+01						L	05:34	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id:	JMERP1DR	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/03/2007 12:22
Client Id:	B1LJR9	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
A07-012	MW6-SBB-A19981								BB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008353	Uranium	2.60E+00	ug/L	2.7E-01		8.38E-02			UTOT_KPA	2.50E-02	02/06/2007	.5	0.1		D
DUP	7440-61-1	2.62E+00		2.7E-01						ML	14:41	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JMETL1GR **Sdg/Rept Nbr:** W05087 34468 **Collection Date:** 01/03/2007 11:04

Client Id: B1LJX0 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
G07-012	MW6-SBB-A19981								BD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008351	ALPHA	8.50E-01	pCi/L	1.0E+00	U	1.73E+00	100.0		9310_ALPHAB	1.938E-01	01/30/2007	32.8	0.5		D
DUP	12587-46-1	1.18E+00		9.8E-01						L	15:34	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JL8XA1CW	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 12/28/2006 11:03
Client Id:	B1LJ83	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**MS**		**Received Date:** 12/28/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-012	MW6-SBB-A19981								AW	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008361	TC-99	3.43E+03	pCi/L	7.7E+02		9.77E+00	100.0	3.56E+03	TC99_ETVDSK	1.269E-01	01/23/2007			60	D
MS	14133-76-7			5.3E+01				96.3		L	19:37			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05087.Edd, h:\Reportdb\edd\FeadIV\Rad\34468.Edd

Lab Sample Id:	JMERQ1DW	**Sdg/Rept Nbr:**	W05087	34468	**Collection Date:** 01/03/2007 13:16
Client Id:	B1LJT1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	MS		**Received Date:** 01/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
A07-012	MW6-SBB-A19981								BC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7008353	Uranium	3.39E+01	ug/L	6.4E+00		7.94E-02		3.43E+01	UTOT_KPA	2.64E-02	02/06/2007			60	D
MS	7440-61-1			6.4E+00				98.8		ML	14:45			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/31/2007 8:52:02 AM

Lot No., Due Date: J7A040186,J7A040214,J7A040243; 02/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7008351; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05087; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JMEFC1AA 109.10<200.00 JMEL71AC 172.30<200.00 JMEME1AC 173.20<200.00 JMEMH1AA 172.90<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JMETL1AG ALPHA 33.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JMEL71AC ALPHA 6.2E+00 L:2.3E+00 JMEME1AC ALPHA 3.3E+00 L:2.0E+00 JMEMG1AC ALPHA 2.7E+00 L:1.8E+00 JMEMH1AA ALPHA 6.1E+00 L:2.2E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	✓		

8.24 Result + 3s >=0, Not Too Negative. OK	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Lisa Antonson Pam Anderson **Date** 1/31/07

1-31-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7008351
W05087

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Kerry A Adam Date: 2-1-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/31/2007 8:53:29 AM

Lot No., Due Date: J7A040214,J7A040243; 02/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7008352; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05087; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JMEL71AD 189.30<200.00 JMER91AD 100.00<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JMEL71AD BETA 6.0E+01 L:3.2E+00 JMEME1AD BETA 2.5E+01 L:2.9E+00 JMEMG1AD BETA 1.0E+01 L:2.8E+00 JMEMH1AC BETA 1.7E+01 L:2.6E+00 JMER91AD BETA 3.3E+03 L:3.4E+00 JMETL1AD BETA 2.5E+03 L:2.8E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	✓		

8.24 Result + 3s >=0, Not Too Negative. OK	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Pam Anderson **Date** 1/31/07

1-31-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7008352
W0587

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4, Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review: Sheryl A Adam Date: 2-1-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

2/1/2007 10:28:36 AM

Lot No., Due Date:	J7A040243; 02/16/2007
Client, Site:	384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test:	7008356; RSR85907 Sr-85/90 by GPC-7
SDG, Matrix:	W05087; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes ✓	No	N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A

4.0 Raw Data

4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes ✓	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A

5.0 Other

5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes ✓	No	N/A
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level Review Pam Anderson Date 2-1-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7008356
W05087

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other 1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 2-5-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/30/2007 4:53:37 PM

Lot No., Due Date: J7A040243; 02/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7008355; RGAMMA Gamma by GER

SDG, Matrix: W05087; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Pam Anderson **Date** 1-30-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7008355
W052087

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4, Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 2-1-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

2/8/2007 10:52:49 AM

Lot No., Due Date: J6L290155,J7A040232,J7A040240; 02/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7008359; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05087; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples Method Differs => JL8141AA LEP<>TB JL8141AC LEP<>TB JMEQA1AA LEP<>TB JMEQ51AA LEP<>TB JMERP1AA LEP<>TB JMJM71AA LEP<>TB JMJM71AC LEP<>TB Q:V6		✓	
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JL8141AA 3.902<4000.00 JMEQA1AA 3.956<4000.00 JMEQ51AA 3.963<4000.00 JMERP1AA 3.937<4000.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => JL8141AA I_FA<>IFA JL8141AC I_FA<>IFA JMEQA1AA I_FA<>IFA JMEQ51AA I_FA<>IFA JMERP1AA I_FA<>IFA JMJM71AA I_FA<>IFA JMJM71AC I_FA<>IFA Q:VC		✓	
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			

8.21 Result < Lc, Activity Not Detected, U Flag. Yes No N/A ✓

No Limit Specified!

8.22 Result < Mdc, Activity Not Detected, U Flag. Yes ✓ No N/A

Batch Positive Result =>
JL8141AA I-129L 9.6E-01 L:5.0E-01
JMEQ51AA I-129L 4.8E-01 L:3.9E-01

8.23 Result <= Action Level, when Defined. Yes ✓ No N/A

OK; No Action Level Found => I-129L

OK; No Callin Level Found => I-129L

8.24 Result + 3s >=0, Not Too Negative. Yes ✓ No N/A

OK

8.25 Counting Spectrum are within FWHM Limits. Yes ✓ No N/A

FWHM > maxFWHM => JMJM71AC I-129L 18>0 Q:V1

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A

Library Not Specified => JL8141AA I:[NUC_LIBR]LEPS.NLB Q:
JL8141AC I:[NUC_LIBR]LEPS.NLB Q:
JMEQA1AA I:[NUC_LIBR]LEPS.NLB Q:
JMEQ51AA I:[NUC_LIBR]LEPS.NLB Q:
JMERP1AA I:[NUC_LIBR]LEPS.NLB Q:
JMJM71AA I:[NUC_LIBR]LEPS.NLB Q:
JMJM71AC I:[NUC_LIBR]LEPS.NLB Q:

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate. Yes ✓ No N/A

OK

First Level Review Pam Anderson **Date** 2-7-08

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7008359
W15087

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sherryl A Adam Date: 2-9-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/30/2007 11:13:38 AM

Lot No., Due Date: J6L290153,J6L290150,J7A040214,J7A040240; 02/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7008361; RTC99 Tc-99 by LSC

SDG, Matrix: W05087; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JL8XA1AC TCSG<>TCSE Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Pam Anderson Date 1-30-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 700/361
W05087

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review: Sheryl A Adam Date: 1-30-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

1/26/2007 1:43:43 PM

Lot No., Due Date: J7A040214,J7A040243; 02/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7008350; RTRITIUM H-3 by LSC

SDG, Matrix: W05087; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JMEL71AA 5.00<10.00 JMEME1AA 5.00<10.00 JMEMG1AA 5.00<10.00 JMER91AA 5.00<10.00 JMETL1AA 5.00<10.00 Q:VB OK AL 1/26/07		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => JMJMX1AF SVP15/5<>SVP10/10 JMJMX1AG SVP15/5<>SVP10/10 JMJMX1AA SVP15/5<>SVP10/10 JMJMX1AC SVP15/5<>SVP10/10 JMJMX1AD SVP15/5<>SVP10/10 JMJMX1AE SVP15/5<>SVP10/10 JMEL71AA SVP15/5<>SVP10/10 JMEME1AA SVP15/5<>SVP10/10 JMEMG1AA SVP15/5<>SVP10/10 JMER91AA SVP15/5<>SVP10/10 JMER91AG SVP15/5<>SVP10/10 JMETL1AA SVP15/5<>SVP10/10 Q:VC OK AL 1/26/07		✓	
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	✓		
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. OK	✓		
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			

8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A ✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes ✓	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => H-3 OK; No Callin Level Found => H-3	Yes ✓	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions).	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Angela Long Pam Anderson **Date** 1-26-07

1/26/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7008350
W05087

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other 1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response: _____

Second Level Review: Sheryl R Adam Date: 1-27-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

2/7/2007 9:08:37 AM

Lot No., Due Date: J7A040214,J7A040240; 02/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7008353; RUNAT UNat by KPA

SDG, Matrix: W05087; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JMJM31AD UNSC<>UNSF Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used No Count Analysis Size found in Batch Data!			✓
8.07 The Correct Count Geometry was Used. No Count Geometry found in Batch Data!			✓
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. No Count Duration Field Found in Batch Data!			✓
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. MDC/MDA > CRDL => JMJM31AA Uranium 2.1E-01>1.4E-01 Q:C1		✓	
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JMEL71AF Uranium 9.1E+00 L:7.8E-02 JMEME1AF Uranium 8.4E+00 L:8.2E-02 JMEMH1AE Uranium 8.6E+00 L:8.3E-02 JMERP1AC Uranium 2.6E+00 L:8.0E-02 JMERQ1AC Uranium 1.8E+01 L:7.7E-02		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => Uranium OK; No Callin Level Found => Uranium	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		

8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Pam Anderson **Date** 2-7-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7008353
W05087

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sheryl R Adams Date: 2-7-07

PNNL W6L290150
W05057
02.12.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-012-350**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, DECEMBER 2006	HNF-N-506-3	**Ice Chest No.** 022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJ98		W	12-2506	1032	1x20-mL P	Activity Scan	None
B1LJ98		W	"	"	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JL 8XV	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington	DEC 28 2006	1300	L. Smith	L. Smith	DEC 28 2006	1300
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL JGL290150
W05057
Due 02-12-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-012-342**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, DECEMBER 2006	HNF-N-520-3	**Ice Chest No.** 022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJJ3		W	12-28-06	0937	1x20-mL P	Activity Scan	None
B1LJJ3		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JL8XP	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington		DEC 28 2006 1300		S. Smith	S. Smith	DEC 28 2006 1300
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

PNNL JL290/50
W05087
Due 02-12-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-012-318**

Page 1 of 1

Collection Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, DECEMBER 2006	HNF-N-506-3	**Ice Chest No.** 022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJ83		W	122806	1103	1x20-mL P	Activity Scan	None
B1LJ83		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						J28XA	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford	D. R. BREWINGTON		DEC 28 2006 1300		S. Smith	S. Smith	DEC 28 2006 1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PNNL 46L290150
W05087
Due 02.12.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-012-310**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, DECEMBER 2006	HNF-N-506-3	**Ice Chest No.** 022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJ78		W	122806	1133	1x20-mL P	Activity Scan	None
B1LJ78		W	"	"	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JL8W7	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington	DEC 28 2006 1300	L. Smith S. Smith		DEC 28 2006 1300
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12-28-06 1300

Client: POW SDG #: W05087 NA [ ] SAF #: W07-012 NA [ ]

Work Order Number: U6L290150 Chain of Custody # W07-012-350, 310, 318, 34[illegible]

Shipping Container ID: 022 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 4
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: L. Smith Date: 12-28-06

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL JLL290153
W05087
Due 02.12.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-012-404**

Page 1 of 1

Collector D. E. FARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, DECEMBER 2006	HNF-N-506 1	**Ice Chest No.** Ross **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJJ8		W	12-28-06	1104	1x20-mL P	Activity Scan	None
B1LJJ8		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JL 8/D	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	D. E. FARCHEN		DEC 28 2006 1300		S. Smith	S. Smith	DEC 28 2006 1300
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PNNL JL290153
W05087
Due 12-12-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-012-396**

Page 1 of 1

Collector D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, DECEMBER 2006	HNF-N-506 1	**Ice Chest No.** R085 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJD6		W	12-28-06	1010	1x20-mL P	Activity Scan	None
B1LJD6		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JL 809	

Relinquished By D. E. PARCHEN Print / Sign	Date/Time 1300 DEC 28 2006	Received By L. Smith Print / S. Smith Sign	Date/Time 1300 DEC 28 2006
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

PNNL JL290153
W05087
Due 02-12-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-012-326**

Page 1 of 1

Collector D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, DECEMBER 2006	HNF-N-506 1	**Ice Chest No.** ROSS **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJ88		W	12-28-06	0921	1x20-mL P	Activity Scan	None
B1LJ88		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JL804	

Relinquished By D. E. PARCHEN Print / Sign	Date/Time 1300 DEC 28 2006	Received By L. Smith S. Smith Print / Sign	Date/Time 1300 DEC 28 2006
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PNNL UL290153
W05087
due 02.12.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-012-294**

Page 1 of 1

Collector D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, DECEMBER 2006	HNF-N-5061	**Ice Chest No.** RUSS **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJ68		W	12-28-06	0821	1x20-mL P	Activity Scan	None
B1LJ68		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JL80T	

Relinquished By D. E. PARCHEN	Print	Sign	Date/Time DEC 28 2006 1300	Received By D. Smith	Print Sign Date/Time DEC 28 2006 1300
Relinquished By			Date/Time	Received By	Date/Time
Relinquished By			Date/Time	Received By	Date/Time
Relinquished By			Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12.28.06 1300

Client: POW SDG #: WO5087 NA [ ] SAF #: W07-012 NA [ ]

Work Order Number: 06L290153 Chain of Custody # W07-012-294, 326, 396, 404

Shipping Container ID: ROSS Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [X] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [X] No [ ]
3. Chain of Custody record present? Yes [X] No [ ]
4. Cooler temperature: _____ NA [X] 5. Vermiculite/packing materials is NA [X] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 4
7. Sample holding times exceeded? NA [X] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ___X___appropriate samples labels
9. Samples are:
   ___X___in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [X] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [X] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [X]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: L. Smith Date: 12.28.06 1300

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL VGL290155
W05087
Due 02-12-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-015-2**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-015	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2UP1-LOI, DECEMBER 2006	HNF-N-506-3	**Ice Chest No.** 022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LK68		W	12-28-06	0839	1x20-mL P	Activity Scan	None
B1LK68		W	"	"	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JL814	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington		DEC 28 2006 1300		J. Smith	S. Smith	DEC 28 2006 1300
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 12/28/06 1300

Client: POW SDG #: W05087 NA [ ] SAF #: I07-015 NA [ ]

Work Order Number: VL290155 Chain of Custody # I07-015-2

Shipping Container ID: 022 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [ ] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [ ] No [ ]
3. Chain of Custody record present? Yes [ ] No [ ]
4. Cooler temperature: _____ NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [ ] Yes [ ] No [ ]
8. Samples have:
   _____ tape
   _____ custody seals
   _____ hazard labels
   1 appropriate samples labels
9. Samples are:
   1 in good condition
   _____ broken
   _____ leaking
   _____ have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed. Yes [ ] No [ ]
12. Were any anomalies identified in sample receipt? Yes [ ] No [ ]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 12-28-06 1300

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL 17A040186
W05087

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Dec 03.16.07

C.O.C. # **W07-012-24**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, DECEMBER 2006	HNF-N-506-4	**Ice Chest No.** GWO-06-11 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LF70		W	1/2/7	1129	1x1000-mL P	9310_ALPHABETA_GPC: Gross Alpha (1)	HNO3 to pH <2
B1LF70		W	↓	↓	1x20-mL P	Activity Scan	None
						JMEFC	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Fluor Hanford R. T. SICKLE		JAN 0 2 2007 1505		S. Smith	S. Smith	JAN 0 2 2007 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 01-02-07 1505

Client: PGW SDG #: W05087 NA [ ] SAF #: W07-012 NA [ ]

Work Order Number: J7A040186 Chain of Custody # W07-012-24

Shipping Container ID: GW0-06-11 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [X] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [X] No [ ]
3. Chain of Custody record present? Yes [X] No [ ]
4. Cooler temperature: _____ NA [X] 5. Vermiculite/packing materials is NA [X] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [X] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   _1_appropriate samples labels
9. Samples are:
   _1_in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [X] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed. Yes [X] No [ ]
12. Were any anomalies identified in sample receipt? Yes [ ] No [X]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 01-02-07 1505

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL JTA040214
W05087
Due 02.16.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-012-500**

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, DECEMBER 2006	HNF-N-506-1	**Ice Chest No.** ROSS **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LDC7		W	1-2-07	0941Z	1x20-mL P	Activity Scan	None
B1LDC7		W	〃	〃	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1LDC7		W	〃	〃	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1LDC7		W	〃	〃	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JMENH	

Relinquished By Print: Fluor Hanford D. E. PARCHEN Sign:	Date/Time: JAN 02 2007 1345	Received By Print: S. Smith Sign: S. Smith	Date/Time: JAN 02 2007 1345	Matrix *	
Relinquished By	Date/Time	Received By	Date/Time	S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air	DS = Drum Solid; DL = Drum Liqui; T = Tissue; WI = Wine; L = Liquid; V = Vegetation; X = Other
Relinquished By	Date/Time	Received By	Date/Time		
Relinquished By	Date/Time	Received By	Date/Time		

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

PNNL 74040214
W05087
Due 02-16-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-012-476

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, DECEMBER 2006	HWF-N-506 1	**Ice Chest No.** ROSS **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LDB2		W	1-2-07	1236	1x20-mL P	Activity Scan	None
B1LDB2		W	〃	〃	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1LDB2		W	〃	〃	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JMEMG	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Fluor Hanford D.E. PARCHEN		JAN 07 2007 1345		S. Smith	S. Smith	JAN 07 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PNNL JTA040214
WO5087
Due 02-16-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-012-492

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, DECEMBER 2006	HNF-W-506-1	**Ice Chest No.** ROSS **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LDC2		W	1-2-07	1134	1x20-mL P	Activity Scan	None
B1LDC2		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1LDC2		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1LDC2		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1LDC2		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JMEME	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Fluor Hanford D. E. PARCHEN		JAN 02 2007 1345		A. Smith	S. Smith	JAN 02 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL 37A040214
W05087
due 02-16-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-012-460**

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, DECEMBER 2006	HWF-N-506-1	**Ice Chest No.** R05 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** 1-20
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LD92		W	1-20 07	1037	1x20-mL P	Activity Scan	None
B1LD92		W	"	"	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1LD92		W	"	"	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1LD92		W	"	"	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1LD92		W	"	"	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JMEL7	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			JAN 02 2007 1345				JAN 02 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 01-02-07 1345

Client: PGW SDG #: W05087 NA [ ] SAF #: 507-012 NA [ ]

Work Order Number: J7A040214 Chain of Custody # 507-012-460, 492, 476, 502

Shipping Container ID: ROSS Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 4
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: L. Smith Date: 01-02-07 1345

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL JMA040232
W05087
Due 02-16-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-012-526**

Page 1 of 1

Collector L.D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, DECEMBER 2006	HNF-N-506 3	**Ice Chest No.** AFS 04-022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LC42		W	1-2-07	1030	1x20-mL P	Activity Scan	None
B1LC42		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JME95	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. Wall	L.D. Wall	L.D. Wall	JAN 02 2007 1445	S. Smith	S. Smith	S. Smith	JAN 02 2007 1445
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

PNNL JA040232
W05087
Due 02.16.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-012-532**

Page 1 of 1

Collector L.D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, DECEMBER 2006	HNF-N-506-3	**Ice Chest No.** AFS-04022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LC39		W	1-2-07	0917	1x20-mL P	Activity Scan	None
B1LC39		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JME QA	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. WALL	L.D. WALL	L.D. Wall	JAN 0 2 2007 1415	L. Smith	L. Smith	L. Smith	JAN 0 2 2007 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 01-02-07 1415

Client: PGW SDG #: W05087 NA [ ] SAF # 507-012 NA [ ]

Work Order Number: JTA040232 Chain of Custody # 507-012-532, 526

Shipping Container ID: AFS-04-022 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [/] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [/] No [ ]
3. Chain of Custody record present? Yes [/] No [ ]
4. Cooler temperature: _____ NA [/] 5. Vermiculite/packing materials is NA [/] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [/] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   __/__appropriate samples labels
9. Samples are:
   __/__in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [/] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [/] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [/]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: L. Smith Date: 01-02-07 1415

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL JTA040240
W05087
Due 02-16-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **A07-012-14**

Page 1 of 1

Collector L.D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. A07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title LLWMA(1)-PA, DECEMBER 2006	HNF-N-5063	**Ice Chest No.** AFS 04022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol Other	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJT1		W	13-07	1316	1x20-mL P	Activity Scan	None
B1LJT1		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1LJT1		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JMERQ	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
L.D. WALL	L.D. Wall	JAN 03 2007 1505	L Smith	S Smith	JAN 03 2007 1505
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PNNL J7A040340
W05087
Due 02-16-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **A07-012-10**

Page 1 of 1

Collector L.D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. A07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title LLWMA(1)-PA, DECEMBER 2006	HNF-N-506 3	**Ice Chest No.** APS 04022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol Other	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJR9		W	1-3-07	1222	1x20-mL P	Activity Scan	None
B1LJR9		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1LJR9		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JMERP	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. WALL	L.D. Wall	L.D. Wall	JAN 03 2007 1505	J. Smith	J. Smith	J. Smith	JAN 03 2007 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 01-03-07 1505

Client: PBW SDG #: W05087 NA [ ] SAF #: A07-012 NA [ ]

Work Order Number: 17A040340 Chain of Custody # A07-012-10, 14

Shipping Container ID: AFS-04-022 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [/] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [/] No [ ]
3. Chain of Custody record present? Yes [/] No [ ]
4. Cooler temperature: _____ NA [/] 5. Vermiculite/packing materials is NA [/] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [/] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   __/__appropriate samples labels
9. Samples are:
   __/__in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [/] pH>2 [/] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [/] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [/]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: L. Smith Date: 01-03-07 1505

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL 37A0402403 W
W05087
due 02-16-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **G07-012-6**

Page 1 of 1

Collector L.D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. G07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB, DECEMBER 2006	HNF-N-506 3	**Ice Chest No.** AFS-04-022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJX0		W	1-3-07	1104	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1LJX0		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1LJX0		W			1x20-mL P	Activity Scan	None
B1LJX0		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1LJX0		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JMETL	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. WALL	L.D. Wall	L.D. Wall	JAN 0 3 2007 1505	S. Smith	S. Smith	S. Smith	JAN 0 3 2007 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PNNL 74040240 3 ss
W05087
Due 02-16-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # G07-012-70

Page 1 of 1

Collector L.D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. G07-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB, DECEMBER 2006	HNF-N-506?	**Ice Chest No.** APS-04-022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LJW0		W	1-3-07	1015	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1LJW0		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1LJW0		W			1x20-mL P	Activity Scan	None
B1LJW0		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1LJW0		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JMER9	

Relinquished By	Print L.D. WALL	Sign L.D. Wall	Date/Time 1505 JAN 03 2007	Received By	Print S. Smith	Sign S. Smith	Date/Time 1505 JAN 03 2007	Matrix *
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 01-03-07 1505

Client: POW SDG #: W05087 NA [ ] SAF #: G07-012 NA [ ]

Work Order Number: JJA041024 3 Chain of Custody # G07-012-70.6

Shipping Container ID: AFS-04-022 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [X] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [X] No [ ]
3. Chain of Custody record present? Yes [X] No [ ]
4. Cooler temperature: _____ NA [X] 5. Vermiculite/packing materials is NA [X] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [X] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   _X_appropriate samples labels
9. Samples are:
   _X_in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [X] pH>2 [X] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [X] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [X]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: L. Smith Date: 01-03-07 1505

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

1/24/2007 10:47:32 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 02/16/2007 W05087

Sep1 DT/Tm Tech:

Batch: 7008351 **WATER** **pCi/L**

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ / APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JMEFC-1-AA J7A040186-1-SAMP 01/02/2007 11:29	109.10g,in AmtRec: 20ML,LP #Containers: 2			1.5	42.9	50/100	10C	1809	1/30/07 MP	Scr: Alpha: -2.71E-05 uCi/Sa Beta: 1.53E-04 uCi/Sa
2 JMEL7-1-AC J7A040214-1-SAMP 01/02/2007 10:37	172.30g,in AmtRec: 20ML,2X500ML,2XLP #Containers: 5				44.9	50	10A	1437	1/30/07	Scr: Alpha: -3.41E-04 uCi/Sa Beta: 7.41E-04 uCi/Sa
3 JMEME-1-AC J7A040214-2-SAMP 01/02/2007 11:34	173.20g,in AmtRec: 20ML,2X500ML,2XLP #Containers: 5				47.0	50	10B			Scr: Alpha: 3.53E-04 uCi/Sa Beta: 2.58E-08 uCi/Sa
4 JMEMG-1-AC J7A040214-3-SAMP 01/02/2007 12:36	201.10g,in AmtRec: 20ML,2XLP #Containers: 3				46.9	50	10C			Scr: Alpha: 5.80E-04 uCi/Sa Beta: -3.76E-04 uCi/Sa
5 JMEMH-1-AA J7A040214-4-SAMP 01/02/2007 09:42	172.90g,in AmtRec: 20ML,2X500ML,LP #Containers: 4				41.2	50	10D			Scr: Alpha: 1.09E-04 uCi/Sa Beta: 7.05E-05 uCi/Sa
6 JMER9-1-AC J7A040243-1-SAMP 01/03/2007 10:15	192.70g,in AmtRec: 20ML,5XLP,4LP #Containers: 7				40.9	50	10F			Scr: Alpha: 5.06E-03 uCi/Sa 3.2E-01L Beta: 8.12E-03 uCi/Sa 1.0E-01L
7 JMETL-1-AC J7A040243-2-SAMP 01/03/2007 11:04	192.00g,in AmtRec: 20ML,5XLP,4LP #Containers: 7				42.6	50	10B	1600	1/30/07 MP	Scr: Alpha: 5.02E-03 uCi/Sa 3.2E-01L Beta: 3.81E-03 uCi/Sa

1/24/2007 10:47:33 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 02/16/2007

Sep1 DT/Tm Tech:

Batch: 7008351 **WATER** **pCi/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JMETL-1-AG-X J7A040243-2-DUP 01/03/2007 11:04		193.80g,in AmtRec: 20ML,5XLP,4LP		1.5	42.4	.50	10 B 1/30/07	1600	1/30/07 DR	
9 JMJM0-1-AA-B J7A080000-351-BLK 01/03/2007 11:04		201.40g,in AmtRec:		0.3		50	10B	1809	1/30/07 DR	
10 JMJM0-1-AC-C J7A080000-351-LCS 01/03/2007 11:04		202.00g,in AmtRec:	ASD4111 01/18/07,pd 02/09/06,r	0.6			10A			

#Containers: 7 — Scr: Alpha: 5.02E-03 uCi/Sa 3.2E-01L Beta: 3.81E-03 uCi/Sa

#Containers: 1 — Scr: Alpha: Beta:

#Containers: 1 — Scr: Alpha: Beta:

Comments: JMEFC-SAMP "Comments. Aliquots reduced due to weight screen activity. JB 01/24/07"
~~JMER9-SAMP Comment~~

pH < 2.0 1-24-07

1% collodion added to ea. samp. 1/30/07 APA

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JMEFC1AA-SAMP Constituent List:
ALPHA RDL:3.00E+00 pCi/L LCL: UCL: RPD:
JMJM01AA-BLK:
ALPHA RDL:3 pCi/L LCL: UCL: RPD:
JMJM01AC-LCS:
Am-241 RDL: pCi/L LCL:70 UCL:130 RPD:20

JMEFC1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JMJM01AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JMJM01AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Sample Preparation/Analysis

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 02/16/2007

Sep1 DT/Tm Tech:

Batch: 7008351 **pCi/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Approved By _____ **Date:** _____

1/24/2007 10:36:18 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: 235

AnalyDueDate: 02/16/2007 W05087

Sep1 DT/Tm Tech:

Batch: 7008352 **WATER** **pCi/L**

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ 1/18/07

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JMEL7-1-AD J7A040214-1-SAMP 01/02/2007 10:37		189.30g,in AmtRec: 20ML,2X500ML,2XLP #Containers: 5		1.5	79.0	100	26A	1516	1/30/07	Scr: Alpha: -3.41E-04 uCi/Sa Beta: 7.41E-04 uCi/Sa
2 JMEME-1-AD J7A040214-2-SAMP 01/02/2007 11:34		201.00g,in AmtRec: 20ML,2X500ML,2XLP #Containers: 5			75.4		26B			Scr: Alpha: 3.53E-04 uCi/Sa Beta: 2.58E-08 uCi/Sa
3 JMEMG-1-AD J7A040214-3-SAMP 01/02/2007 12:36		200.50g,in AmtRec: 20ML,2XLP #Containers: 3			65.4		26C			Scr: Alpha: 5.80E-04 uCi/Sa Beta: -3.76E-04 uCi/Sa
4 JMEMG-1-AE-X J7A040214-3-DUP 01/02/2007 12:36		201.20g,in AmtRec: 20ML,2XLP #Containers: 3			66.7		26D			Scr: Alpha: 5.80E-04 uCi/Sa Beta: -3.76E-04 uCi/Sa
5 JMEMH-1-AC J7A040214-4-SAMP 01/02/2007 09:42		201.90g,in AmtRec: 20ML,2X500ML,LP #Containers: 4			84.1		27A			Scr: Alpha: 1.09E-04 uCi/Sa Beta: 7.05E-05 uCi/Sa
6 JMER9-1-AD J7A040243-1-SAMP 01/03/2007 10:15		100.00g,in AmtRec: 20ML,5XLP,4LP #Containers: 7			28.8	200	28A	1652		Scr: Alpha: 5.06E-03 uCi/Sa 3.2E-01L Beta: 8.12E-03 uCi/Sa 1.0E-01L
7 JMETL-1-AD J7A040243-2-SAMP 01/03/2007 11:04		201.00g,in AmtRec: 20ML,5XLP,4LP #Containers: 7			68.9		27B	1514		Scr: Alpha: 5.02E-03 uCi/Sa 3.2E-01L Beta: 3.81E-03 uCi/Sa

1/24/2007 10:36:20 AM

Sample Preparation/Analysis

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 02/16/2007

Sep1 DT/Tm Tech:

Batch: 7008352 **pCi/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JMJM2-1-AA-B J7A080000-352-BLK 01/02/2007 12:36		200.90g,in AmtRec:	#Containers: 1	1.5	0.2	200	JSB Scr:	1/26 Alpha:	1/30/07 Beta:	
9 JMJM2-1-AC-C J7A080000-352-LCS 01/02/2007 12:36		202.50g,in AmtRec:	BESB2994 12/21/06,pd 08/08/06,r #Containers: 1	↓	0.2	↓	JSC Scr:	Alpha:	Beta:	

Comments: JMER9-SAMP "Comments. Aliquot reduced due to screening activity. JB 01/24/07"

PH < 2.0 JB 1-24-07

10% collection added to ea. samp. 1/30/07 APA

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JMEL71AD-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JMJM21AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JMJM21AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JMEL71AD-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JMJM21AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JMJM21AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

1/22/2007 9:33:10 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory , Pacific Northwest National Lab

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 02/16/2007 W05087

Sep1 DT/Tm Tech: 1-23-07 9:28 PM

Batch: 7008356 **WATER** **pCi/L**
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep2 DT/Tm Tech: 1-30-07 8:24 AM DRM

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JMER9-1-AF J7A040243-1-SAMP YTA16912 Ex:1/3/2008		1007.00g,in	SRTB14432 01/18/07,pd 09/11/06,r	1.678 1.9986 0.8396	1.0"	23.6	100 40	9" 7A 7A	0705 0553 0549	1/24/07 1/31/07 2/1/07	
01/03/2007 10:15		AmtRec: 20ML,5XLP,4LP	#Containers: 7					Scr: Alpha: 5.06E-03 uCi/Sa	3.2E-01L	Beta: 8.12E-03 uCi/Sa	1.0E-01L
2 JMER9-1-AJ-X J7A040243-1-DUP YTA16913 Ex:1/3/2008		1005.80g,in	SRTB14433 01/18/07,pd 09/11/06,r	1.796 1.9986 0.8886		23.7	40	3" 7B 7C	0705 0553 0549	1/24/07 1/31/07 2/1/07	
01/03/2007 10:15		AmtRec: 20ML,5XLP,4LP	#Containers: 7					Scr: Alpha: 5.06E-03 uCi/Sa	3.2E-01L	Beta: 8.12E-03 uCi/Sa	1.0E-01L
3 JMETL-1-AF J7A040243-2-SAMP YTA16914 Ex:1/3/2008		1004.90g,in	SRTB14434 01/18/07,pd 09/11/06,r	1.609 1.9890 0.8356		23.8	80	9" 7C 7A	0737 0553 0716	1/24/07 1/31/07 2/1/07	
01/03/2007 11:04		AmtRec: 20ML,5XLP,4LP	#Containers: 7					Scr: Alpha: 5.02E-03 uCi/Sa	3.2E-01L	Beta: 3.81E-03 uCi/Sa	
4 JMJM6-1-AA-B J7A080000-356-BLK YTA16915 Ex:1/3/2008		999.90g,in	SRTB14435 01/18/07,pd 09/11/06,r	1.505 1.9890 0.7567		23.5		3" 4A 1B	0737 0553 0649	1/24/07 1/31/07 2/1/07	
01/03/2007 10:15		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

1/22/2007 9:33:14 AM

Sample Preparation/Analysis

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 02/16/2007

Sep1 DT/Tm Tech:

Batch: 7008356 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
5 JMJM6-1-AC-C J7A080000-356-LCS		1000.20g,in	SRSG1306 12/20/06,pd 09/11/06,r	1.486 2.0063 0.7407	1"	28.9	100	9" YB IC	0816 0953 0649	1/24/07 ~ 1/31/07 2/1/07	

VTA18916
EX:1/3/2008

01/03/2007 10:15 AmtRec: #Containers: 1 Scr: Alpha: Beta:

Comments: pH <2.0 81-22-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JMER91AF-SAMP Constituent List:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JMJM61AA-BLK:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:

JMJM61AC-LCS:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JMER91AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JMJM61AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JMJM61AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

1/22/2007 8:45:47 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 02/16/2007 W05087

Sep1 DT/Tm Tech:

Batch: 7008355 **WATER** **pCi/L**

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ / A PA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 **JMER9-1-AE** J7A040243-1-SAMP 01/03/2007 10:15		1952.20g,in AmtRec: 20ML,5XLP,4LP	#Containers: 7		100mL	100	64	1250	1/26/07 3 Scr: Alpha: 5.06E-03 uCi/Sa 3.2E-01L Beta: 8.12E-03 uCi/Sa 1.0E-01L	
2 **JMER9-1-AH-X** J7A040243-1-DUP 01/03/2007 10:15		1955.20g,in AmtRec: 20ML,5XLP,4LP	#Containers: 7				65	1250	Scr: Alpha: 5.06E-03 uCi/Sa 3.2E-01L Beta: 8.12E-03 uCi/Sa 1.0E-01L	
3 **JMETL-1-AE** J7A040243-2-SAMP 01/03/2007 11:04		2000.10g,in AmtRec: 20ML,5XLP,4LP	#Containers: 7				66	1251	Scr: Alpha: 5.02E-03 uCi/Sa 3.2E-01L Beta: 3.81E-03 uCi/Sa	
4 **JMJM5-1-AA-B** J7A080000-355-BLK 01/03/2007 10:15		2000.10g,in AmtRec:	#Containers: 1				67	1251	Scr: Alpha: Beta:	
5 **JMJM5-1-AC-C** J7A080000-355-LCS 01/03/2007 10:15		2000.00g,in AmtRec:	QCAG1326 01/09/07,pd 03/07/05,r #Containers: 1				68	1251	Scr: Alpha: Beta:	

Comments: PH <2.0 QB 1-22-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JMER91AE-SAMP Constituent List:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

1/26/2007 9:33:59 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory , Pacific Northwest National Lab

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 02/12/2007 W05087

Sep1 DT/Tm Tech:

Batch: 7008359 **WATER** **pCi/L** **PM, Quote: SA , 57671**

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ, BOSTEDD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 **JL814-1-AA** J6L290155-1-SAMP 12/28/2006 08:39		3902.10g,in AmtRec: 20ML,2X4LP #Containers: 3	ITA5982 01/17/07		33.3	100	L2	1635	2/7/07 r Scr: Alpha: 1.25E-03 uCi/Sa Beta: 9.43E-05 uCi/Sa	
2 **JL814-1-AC-X** J6L290155-1-DUP 12/28/2006 08:39		3903.40g,in AmtRec: 20ML,2X4LP #Containers: 3	ITA5983 01/17/07		32.4		L4	1637	2/7/07 r Scr: Alpha: 1.25E-03 uCi/Sa Beta: 9.43E-05 uCi/Sa	
3 **JMEQA-1-AA** J7A040232-1-SAMP 01/02/2007 09:17		3956.20g,in AmtRec: 20ML,2X4LP #Containers: 3	ITA5985 01/17/07		30.9		L5	1638	2/7/07 r Scr: Alpha: -2.30E-04 uCi/Sa Beta: 2.07E-03 uCi/Sa	
4 **JMEQ5-1-AA** J7A040232-2-SAMP 01/02/2007 10:30		3963.20g,in AmtRec: 20ML,2X4LP #Containers: 3	ITA5984 01/17/07		34.1		L2	1856	2/7/07 0700 Scr: Alpha: 4.46E-04 uCi/Sa Beta: 1.69E-03 uCi/Sa	
5 **JMERP-1-AA** J7A040240-1-SAMP 01/03/2007 12:22		3936.80g,in AmtRec: 20ML,500ML,2X4LP #Containers: 4	ITA5986 01/17/07		32.3		L4	1857	Scr: Alpha: -3.23E-04 uCi/Sa Beta: 2.30E-03 uCi/Sa	
6 **JMJM7-1-AA-B** J7A080000-359-BLK 12/28/2006 08:39		3884.00g,in AmtRec: #Containers: 1	ITA5987 01/17/07		33.4		L5	1857	Scr: Alpha: Beta:	
7 **JMJM7-1-AC-C** J7A080000-359-LCS 12/28/2006 08:39		4001.00g,in AmtRec: #Containers: 1	ISD0720 12/14/06,pd 11/17/04,r		31.9		L2	2042	2/7/07 0700 Scr: Alpha: Beta:	

1/19/2007 7:10:59 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 02/12/2007 W05087

Sep1 DT/Tm Tech:

Batch: 7008361 **WATER** **pCi/L** **PM, Quote: SA , 57671**

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 **JL8W7-1-AA** J6L290150-1-SAMP 12/28/2006 11:33			125.00g,in	125.00g		60				
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: -1.62E-04 uCi/Sa		Beta: 1.57E-04 uCi/Sa
2 **JL8W7-1-AC-X** J6L290150-1-DUP 12/28/2006 11:33			125.20g,in	125.20g						
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: -1.62E-04 uCi/Sa		Beta: 1.57E-04 uCi/Sa
3 **JL8XA-1-AA** J6L290150-2-SAMP 12/28/2006 11:03			125.10g,in	125.10g						
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: 4.70E-05 uCi/Sa		Beta: 3.95E-05 uCi/Sa
4 **JL8XA-1-AC-S** J6L290150-2-MS 12/28/2006 11:03			126.90g,in	126.90g	tcsg1757 01/03/07,pd 01/10/06,r					
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: 4.70E-05 uCi/Sa		Beta: 3.95E-05 uCi/Sa
5 **JL8XP-1-AA** J6L290150-3-SAMP 12/28/2006 09:37			126.30g,in	126.30g						
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: -1.21E-04 uCi/Sa		Beta: 6.89E-05 uCi/Sa
6 **JL8XV-1-AA** J6L290150-4-SAMP 12/28/2006 10:32			126.70g,in	126.70g						
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: -1.27E-04 uCi/Sa		Beta: 6.89E-05 uCi/Sa
7 **JL80T-1-AA** J6L290153-1-SAMP 12/28/2006 08:21			125.20g,in	125.20g						
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: 2.04E-04 uCi/Sa		Beta: 7.49E-05 uCi/Sa

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 02/12/2007

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Batch: 7008361 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Balance Id:1120482733
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 **JL804-1-AA** J6L290153-2-SAMP 12/28/2006 09:21			125.30g,in	125.30g		60				
	AmtRec: 20ML,500ML		#Containers: 2			Scr:	Alpha: -1.92E-05 uCi/Sa		Beta: -3.55E-05 uCi/Sa	
9 **JL809-1-AA** J6L290153-3-SAMP 12/28/2006 10:10			125.60g,in	125.60g						
	AmtRec: 20ML,500ML		#Containers: 2			Scr:	Alpha: 1.13E-04 uCi/Sa		Beta: 5.89E-06 uCi/Sa	
10 **JL81D-1-AA** J6L290153-4-SAMP 12/28/2006 11:04			126.80g,in	126.80g						
	AmtRec: 20ML,500ML		#Containers: 2			Scr:	Alpha: 1.30E-04 uCi/Sa		Beta: -2.35E-05 uCi/Sa	
11 **JMEL7-1-AE** J7A040214-1-SAMP 01/02/2007 10:37			125.90g,in	125.90g						
	AmtRec: 20ML,2X500ML,2XLP		#Containers: 5			Scr:	Alpha: -3.41E-04 uCi/Sa		Beta: 7.41E-04 uCi/Sa	
12 **JMEME-1-AE** J7A040214-2-SAMP 01/02/2007 11:34			125.20g,in	125.20g						
	AmtRec: 20ML,2X500ML,2XLP		#Containers: 5			Scr:	Alpha: 3.53E-04 uCi/Sa		Beta: 2.58E-08 uCi/Sa	
13 **JMEMH-1-AD** J7A040214-4-SAMP 01/02/2007 09:42			125.40g,in	125.40g						
	AmtRec: 20ML,2X500ML,LP		#Containers: 4			Scr:	Alpha: 1.09E-04 uCi/Sa		Beta: 7.05E-05 uCi/Sa	
14 **JMERQ-1-AA** J7A040240-2-SAMP 01/03/2007 13:16			125.60g,in	125.60g						
	AmtRec: 20ML,2X500MLP		#Containers: 3			Scr:	Alpha: -6.55E-05 uCi/Sa		Beta: 8.26E-05 uCi/Sa	

1/19/2007 7:11:03 AM

Sample Preparation/Analysis

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 02/12/2007

Sep1 DT/Tm Tech:

Batch: 7008361 **pCi/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 JMJM8-1-AA-B J7A080000-361-BLK 12/28/2006 11:33			201.30g,in AmtRec:	201.30g #Containers: 1		60 Scr:		Alpha:		Beta:
16 JMJM8-1-AC-C J7A080000-361-LCS 12/28/2006 11:33			199.90g,in AmtRec:	199.90g #Containers: 1	TCSE2057 12/20/06,pd 01/10/06,r	Scr:		Alpha:		Beta:
17 JMJM8-1-AD-BN J7A080000-361-IBLK 12/28/2006 11:33			AmtRec:	#Containers: 1		Scr:		Alpha:		Beta:
18 JMJM8-1-AE-BN J7A080000-361-IBLK 12/28/2006 11:33			AmtRec:	#Containers: 1		Scr:		Alpha:		Beta:

Comments: pH < 2.0 SB 1-19-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JL8W71AA-SAMP Constituent List:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JL8XA1AC-MS:

JMJM81AA-BLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:
JMJM81AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

1/8/2007 2:49:19 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 02/16/2007 WO5087

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Batch: 7008350 **WATER** **pCi/L**
SEQ Batch, Test: None

PM, Quote: SA , 57671

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 1720 Tkm
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JMEL7-1-AA J7A040214-1-SAMP 01/02/2007 10:37	AmtRec: 20ML,2X500ML,2XLP	#Containers: 5				Scr:	Alpha:	Beta:
2 JMEME-1-AA J7A040214-2-SAMP 01/02/2007 11:34	AmtRec: 20ML,2X500ML,2XLP	#Containers: 5				Scr:	Alpha:	Beta:
3 JMEMG-1-AA J7A040214-3-SAMP 01/02/2007 12:36	AmtRec: 20ML,2XLP	#Containers: 3				Scr:	Alpha:	Beta:
4 JMER9-1-AA J7A040243-1-SAMP 01/03/2007 10:15	AmtRec: 20ML,5XLP,4LP	#Containers: 7				Scr:	Alpha:	Beta:
5 JMER9-1-AG-X J7A040243-1-DUP 01/03/2007 10:15	AmtRec: 20ML,5XLP,4LP	#Containers: 7				Scr:	Alpha:	Beta:
6 JMETL-1-AA J7A040243-2-SAMP 01/03/2007 11:04	AmtRec: 20ML,5XLP,4LP	#Containers: 7				Scr:	Alpha:	Beta:
7 JMJMX-1-AA-B J7A080000-350-BLK 01/03/2007 10:15	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

1/8/2007 2:49:22 PM

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 1-22-07 Tom
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 02/16/2007

Batch: 7008350 **pCi/L**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JMJMX-1-AC-C J7A080000-350-LCS 01/03/2007 10:15	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
9 JMJMX-1-AD-BX J7A080000-350-MBLK 01/03/2007 10:15	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
10 JMJMX-1-AE-CM J7A080000-350-MLCS 01/03/2007 10:15	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
11 JMJMX-1-AF-BN J7A080000-350-IBLK 01/03/2007 10:15	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
12 JMJMX-1-AG-BN J7A080000-350-IBLK 01/03/2007 10:15	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JMEL71AA-SAMP Constituent List:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12445
Pipet #: _____
Sep1 DT/Tm Tech: 1-22 0 Tan
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 02/16/2007

Batch: 7008350 **pCi/L**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

```
JMJMX1AA-BLK:
  H-3          RDL:400          pCi/L      LCL:          UCL:          RPD:
JMJMX1AC-LCS:
  H-3          RDL:400          pCi/L      LCL:70        UCL:130       RPD:20
JMJMX1AD-MBLK:
  H-3          RDL:400          pCi/L      LCL:          UCL:          RPD:
JMJMX1AE-MLCS:
  H-3          RDL:400          pCi/L      LCL:70        UCL:130       RPD:20
JMJMX1AF-IBLK:
  H-3          RDL:400          pCi/L      LCL:          UCL:          RPD:
JMJMX1AG-IBLK:
  H-3          RDL:400          pCi/L      LCL:          UCL:          RPD:
JMEL71AA-SAMP Calc Info:
     Uncert Level (#s).: 2      Decay to SaDt: Y      Blk Subt.: N      Sci.Not.: Y      ODRs: B
JMJMX1AA-BLK:
     Uncert Level (#s).: 2      Decay to SaDt: Y      Blk Subt.: N      Sci.Not.: Y      ODRs: B
JMJMX1AC-LCS:
     Uncert Level (#s).: 2      Decay to SaDt: Y      Blk Subt.: N      Sci.Not.: Y      ODRs: B
JMJMX1AD-MBLK:
     Uncert Level (#s).: 2      Decay to SaDt: Y      Blk Subt.: N      Sci.Not.: Y      ODRs: B
JMJMX1AE-MLCS:
     Uncert Level (#s).: 2      Decay to SaDt: Y      Blk Subt.: N      Sci.Not.: Y      ODRs: B
JMJMX1AF-IBLK:
     Uncert Level (#s).: 2      Decay to SaDt: Y      Blk Subt.: N      Sci.Not.: Y      ODRs: B
JMJMX1AG-IBLK:
     Uncert Level (#s).: 2      Decay to SaDt: Y      Blk Subt.: N      Sci.Not.: Y      ODRs: B
```

Approved By _____ **Date:** _____

1/25/2007 8:02:27 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 02/16/2007 W05087

Sep1 DT/Tm Tech:

Batch: 7008353 **WATER** **ug/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7008350 ARS6, 7008351 AZS7, 7008352 BCS8, 7008353 DHSS, 7008361 FPS5,

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 **JMEL7-1-AF** J7A040214-1-SAMP 01/02/2007 10:37		26.90g,in AmtRec: 20ML,2X500ML,2XLP	#Containers: 5			Scr:	Alpha: -3.41E-04 uCi/Sa	Beta: 7.41E-04 uCi/Sa
2 **JMEME-1-AF** J7A040214-2-SAMP 01/02/2007 11:34		25.70g,in AmtRec: 20ML,2X500ML,2XLP	#Containers: 5			Scr:	Alpha: 3.53E-04 uCi/Sa	Beta: 2.58E-08 uCi/Sa
3 **JMEMH-1-AE** J7A040214-4-SAMP 01/02/2007 09:42		25.20g,in AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha: 1.09E-04 uCi/Sa	Beta: 7.05E-05 uCi/Sa
4 **JMERP-1-AC** J7A040240-1-SAMP 01/03/2007 12:22		26.10g,in AmtRec: 20ML,500ML,2X4LP	#Containers: 4			Scr:	Alpha: -3.23E-04 uCi/Sa	Beta: 2.30E-03 uCi/Sa
5 **JMERP-1-AD-X** J7A040240-1-DUP 01/03/2007 12:22		25.00g,in AmtRec: 20ML,500ML,2X4LP	#Containers: 4			Scr:	Alpha: -3.23E-04 uCi/Sa	Beta: 2.30E-03 uCi/Sa
6 **JMERQ-1-AC** J7A040240-2-SAMP 01/03/2007 13:16		27.10g,in AmtRec: 20ML,2X500MLP	#Containers: 3			Scr:	Alpha: -6.55E-05 uCi/Sa	Beta: 8.26E-05 uCi/Sa
7 **JMERQ-1-AD-S** J7A040240-2-MS 01/03/2007 13:16		26.40g,in AmtRec: 20ML,2X500MLP	unsf3561 01/23/07,pd 03/22/05,r #Containers: 3			Scr:	Alpha: -6.55E-05 uCi/Sa	Beta: 8.26E-05 uCi/Sa

1/25/2007 8:02:30 AM

Sample Preparation/Analysis

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 02/16/2007

Sep1 DT/Tm Tech:

Batch: 7008353 **ug/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JMJM3-1-AA-B J7A080000-353-BLK 01/03/2007 12:22		25.20g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
9 JMJM3-1-AC-C J7A080000-353-LCS 01/03/2007 12:22		25.80g,in AmtRec:	unsf3562 01/23/07,pd 03/22/05,r #Containers: 1			Scr:	Alpha:	Beta:
10 JMJM3-1-AD-C J7A080000-353-LCS 01/03/2007 12:22		25.50g,in AmtRec:	unsc1472 12/18/06,pd 04/28/06,r #Containers: 1			Scr:	Alpha:	Beta:

Comments: PH <2.0 QB 1-25-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JMEL71AF-SAMP Constituent List:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
JMERQ1AD-MS:

JMJM31AA-BLK:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
JMJM31AC-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20
JMJM31AD-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

JMEL71AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JMERQ1AD-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

ICOC Fraction Transfer/Status Report

ByDate: 1/31/2006, 2/5/2007, Batch: '7008351', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7008351							
AC			CalcC	BockJ	1/24/2007 10:36:42		
SC				wagarr	IsBatched	1/8/2007 2:46:09 PM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep	1/24/2007 10:36:42 AM	rich-rc-5014 rEVISION 6
SC				AshworthA	InPrep2	1/29/2007 12:57:46 PM	RICH-RC-5014 REVISION 6
SC				AshworthA	Prep2C	1/30/2007 1:20:04 PM	RICH-RC-5014 REVISION 6
SC				BlackCL	InCnt1	1/30/2007 1:28:29 PM	RICH-RD-0003 REVISION 4
SC				DAWKINSO	CalcC	1/30/2007 8:49:34 PM	RICH-RD-0003 REVISION 4
AC				AshworthA	1/29/2007 12:57:46		
AC				AshworthA	1/30/2007 1:20:04 PM		
AC				BlackCL	1/30/2007 1:28:29 PM		
AC				DAWKINSO	1/30/2007 8:49:34 PM		

AC: Accepting Entry; SC: Status Change

ICOC Fraction Transfer/Status Report

ByDate: 1/31/2006, 2/5/2007, Batch: '7008352', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting		Comments
7008352						
AC			CalcC	BockJ	1/24/2007 10:28:56	
SC				wagarr	IsBatched 1/8/2007 2:46:09 PM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep 1/24/2007 10:28:56 AM	rich-rc-5014 rEVISION 6
SC				BockJ	Prep1C 1/24/2007 10:36:23 AM	RICH-RC-5014 REVISION 6
SC				AshworthA	InPrep2 1/29/2007 12:57:52 PM	RICH-RC-5014 REVISION 6
SC				AshworthA	Prep2C 1/30/2007 1:20:11 PM	RICH-RC-5014 REVISION 6
SC				BlackCL	InCnt1 1/30/2007 1:28:36 PM	RICH-RD-0003 REVISION 4
SC				DAWKINSO	CalcC 1/30/2007 8:49:27 PM	RICH-RD-0003 REVISION 4
AC				**BockJ**	1/24/2007 10:36:23	
AC				**AshworthA**	1/29/2007 12:57:52	
AC				**AshworthA**	1/30/2007 1:20:11 PM	
AC				**BlackCL**	1/30/2007 1:28:36 PM	
AC				**DAWKINSO**	1/30/2007 8:49:27 PM	

AC: Accepting Entry; SC: Status Change

ICOC Fraction Transfer/Status Report

ByDate: 2/1/2006, 2/6/2007, Batch: '7008356', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7008356							
AC			CalcC	BockJ	1/22/2007 9:23:51		
SC				wagarr	IsBatched	1/8/2007 2:46:09 PM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep	1/22/2007 9:23:51 AM	RICH-RC-5016 Revision 6
SC				BockJ	Prep1C	1/22/2007 9:34:03 AM	RICH-RC-5016 REVISION 6
SC				FABREM	Sep1C	1/23/2007 9:32:16 PM	RICH-RC-5006 REVISION 6
SC				DAWKINSO	InCnt1	1/23/2007 9:45:28 PM	RICH-RD-0007 REVISION 5
SC				StringerR	Cnt1C	1/24/2007 9:28:24 AM	RICH-RD-0007 REVISION 5
SC				ManisD	Sep2C	1/30/2007 1:12:32 PM	RICH-RC-5071 REV 4
SC				DAWKINSO	InCnt2	1/30/2007 1:26:11 PM	RICH-RD-0003 REVISION 4
SC				BlackCL	CalcC	2/1/2007 7:26:20 AM	RICH-RD-0003 REVISION 4
AC				**BockJ**	1/22/2007 9:34:03		
AC				**FABREM**	1/23/2007 9:32:16 PM		
AC				**DAWKINSO**	1/23/2007 9:45:28 PM		
AC				**StringerR**	1/24/2007 9:28:24		
AC				**DAWKINSO**	1/30/2007 1:26:11 PM		
AC				**BlackCL**	2/1/2007 7:26:20 AM		

ICOC Fraction Transfer/Status Report

ByDate: 1/30/2006, 2/4/2007, Batch: '7008355', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7008355							
AC			CalcC	BockJ	1/22/2007 8:37:53		
SC				wagarr	IsBatched	1/8/2007 2:46:09 PM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep	1/22/2007 8:37:53 AM	RICH-RC-5016 Revision 6
SC				BockJ	Prep1C	1/22/2007 8:45:51 AM	RICH-RC-5017 REVISION 5
SC				AshworthA	InPrep2	1/29/2007 8:39:55 AM	RICH-RC-5017 REVISION 4
SC				AshworthA	Prep2C	1/30/2007 10:29:30 AM	RICH-RC-5017 REVISION 4
SC				BlackCL	InCnt1	1/30/2007 10:47:19 AM	RICH-RD-0007 REVISION 5
SC				BlackCL	CalcC	1/30/2007 1:00:18 PM	RICH-RD-0007 REVISION 5
AC				BockJ	1/22/2007 8:45:51		
AC				AshworthA	1/29/2007 8:39:55		
AC				AshworthA	1/30/2007 10:29:30		
AC				BlackCL	1/30/2007 10:47:19		
AC				BlackCL	1/30/2007 1:00:18 PM		

ICOC Fraction Transfer/Status Report

ByDate: 2/8/2006, 2/13/2007, Batch: '7008359', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7008359							
AC			CalcC	BockJ	1/26/2007 9:07:22		
SC				wagarr	IsBatched	1/8/2007 2:46:09 PM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep	1/26/2007 9:07:22 AM	RICH-RC-5014 Revision 6
SC				BockJ	Prep1C	1/26/2007 9:34:34 AM	RICH-RC-5017 REVISION 5
SC				BostedD	Prep2C	2/7/2007 2:45:41 PM	RICHRC5025 REV3
SC				StringerR	InCnt1	2/7/2007 2:52:11 PM	RICH-RD-0007 REVISION 5
SC				DAWKINSO	CalcC	2/7/2007 8:37:25 PM	RICH-RD-0007 REVISION 5
AC				BockJ	1/26/2007 9:34:34		
AC				BostedD	2/7/2007 2:45:41 PM		
AC				StringerR	2/7/2007 2:52:11 PM		
AC				DAWKINSO	2/7/2007 8:37:25 PM		

AC: Accepting Entry; SC: Status Change

ICOC Fraction Transfer/Status Report

ByDate: 1/30/2006, 2/4/2007, Batch: '7008361', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7008361						
AC		CalcC	**BockJ**	1/19/2007 6:57:48		
SC			wagarr	IsBatched	1/8/2007 2:46:09 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	1/19/2007 6:57:48 AM	rich-rc-5016 rEVISION 6
SC			BockJ	Prep1C	1/19/2007 7:11:03 AM	RICH-RC-5016 REVISION 6
SC			HarveyK	InSep1	1/19/2007 8:32:16 AM	RICH-RC-5065 REV5
SC			FABREM	Sep1C	1/22/2007 6:16:40 PM	RICH-RC-5065 REVISION 5
SC			DAWKINSO	InCnt1	1/22/2007 6:21:08 PM	RICH-RD-0001 REVISION 3
SC			BlackCL	CalcC	1/25/2007 5:56:58 AM	RICH-RD-0001 REVISION 3
AC			**BockJ**	1/19/2007 7:11:03		
AC			**HarveyK**	1/19/2007 8:32:16		
AC			**FABREM**	1/22/2007 6:16:40 PM		
AC			**DAWKINSO**	1/22/2007 6:21:08 PM		
AC			**BlackCL**	1/25/2007 5:56:58		

AC: Accepting Entry; SC: Status Change

ICOC Fraction Transfer/Status Report

ByDate: 1/26/2006, 1/31/2007, Batch: '7008350', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7008350							
AC			CalcC	McDowellD	1/22/2007 9:13:12		
SC				wagarr	IsBatched	1/8/2007 2:46:09 PM	ICOC_RADCALC v4.8.26
SC				McDowellD	InSep1	1/22/2007 9:13:12 AM	RICH-RC-5007 REVISION 6
SC				McDowellD	Sep1C	1/22/2007 1:26:32 PM	RICH-RC-5007 REVISION 6
SC				DAWKINSO	InCnt1	1/22/2007 1:46:01 PM	RICH-RD-0001 REVISION 3
SC				BlackCL	CalcC	1/25/2007 5:38:05 AM	RICH-RD-0001 REVISION 3
AC				McDowellD	1/22/2007 1:26:32 PM		
AC				DAWKINSO	1/22/2007 1:46:01 PM		
AC				BlackCL	1/25/2007 5:38:05		

AC: Accepting Entry; SC: Status Change

ICOC Fraction Transfer/Status Report

ByDate: 2/7/2006, 2/12/2007, Batch: '7008353', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7008353						
AC		Cnt1C	BockJ	1/25/2007 7:34:34		
SC			wagarr	IsBatched	1/8/2007 2:46:09 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	1/25/2007 7:34:34 AM	RICH-RC-5015 Revision 4
SC			BockJ	Prep1C	1/25/2007 8:02:28 AM	RICH-RC-5015 REVISION 4
SC			AntonsonL	InSep1	1/31/2007 1:52:43 PM	RICH-RC-5015 REVISION 4
SC			AntonsonL	Sep1C	2/5/2007 2:43:55 PM	RICH-RC-5015 REVISION 4
SC			NelsonT	Cnt1C	2/6/2007 2:53:46 PM	RICH-RC-5058 REV 7
AC			BockJ	1/25/2007 8:02:28		
AC			AntonsonL	1/31/2007 1:52:43 PM		
AC			AntonsonL	2/5/2007 2:43:55 PM		
AC			NelsonT	2/6/2007 2:53:46 PM		